

Date: Monday, 1/7/2008 4:29:14 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : DOUBLER KIT - UNDER REVIEW
 Job Number : 36652E
 Estimate Number : 11452
 P.O. Number :
 This Issue : 1/7/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D314057
 Drawing Number : D3140 REV F
 Project Number : N/A
 Drawing Revision : F
 First Issue : 1/1 Type : SMALL /MED FAB
 Material :
 Previous Run : 27340E Due Date : 2/28/2008 Qty: 1 Um: Each
 Written By :
 Checked & Approved By :
 Comment : Est. B 02.11.13 Removed D3140-65/-81/-83; Added D3140-301 KJ
 Est. Rev C New dwg rev. ecn781 06.04.18 EC
 Est Rev:D As per ECN #829 06-11-20 JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 D314009 Doubler Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler Assembly

Pick:

Qty Part Number Description Batch

1 D3140-09 Doubler Assy B 31177 x 1 / B 34773 x 1

2.0 D3140101



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Doubler

Pick:

Qty Part Number Description Batch

2 D3140-101 Doubler B 33157 x 4

3.0 D3140241

Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Pick:

Qty Part Number Description Batch

1 D3140-241 Doubler B 18470

4.0 D3140301

Doubler



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Doubler

Pick:

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/7/2008 4:29:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER KIT - UNDER REVIEW

Job Number: 36652E

Part Number: D314057

Job Number:



Seq. #:

Machine Or Operation:

Description :

Qty	Part Number	Description	Batch
2	D3140-301	Doubler	B 34381 x 1

B 36762 x 2 ✓

5.0

D314087

Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Pick:

Qty	Part Number	Description	Batch
1	D3140-87	Doubler	B 34381 x 2

B 34381 x 2 ✓

6.0

D314091

Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Pick:

Qty	Part Number	Description	Batch
1	D3140-91	Doubler	B 27377

B 27377 ✓

7.0

D314095

Doubler



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

Doubler

Pick:

Qty	Part Number	Description	Batch
3	D3140-95	Doubler	B 27346 x 4

B 27346 x 4 ✓

8.0

D314097

Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Pick:

Qty	Part Number	Description	Batch
1	D3140-97	Doubler	

see WIO: # 27340E
62

9.0

D314099

Doubler



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Doubler

Pick:

Qty	Part Number	Description	Batch
1	D3140-99	Doubler	B 35154

B 35154

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/7/2008 4:29:14 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: DOUBLER KIT - UNDER REVIEW

Job Number: 36652E

Part Number: D314057

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D3140103

DOUBLER



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3140-103 Doubler

~~B 27371 x 2~~

11.0

D3140105

DOUBLER



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3140-105 Doubler

B 34379 x 2

12.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

~~ALL~~ D 08/02/26

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

N/A ship to celestak

14.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

D 08/02/26

Job Completion



C 2081021 25

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED #	DRAWING NO. D3140	REV. F SHEET 1 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS
A	02.04.18	NEW ISSUE	
B	03.01.23	REMOVE -65/-81/-83; ADD -301/-303	
C	04.11.08	CHANGE DELASTEK SPEC. TEC-77; ADD PART MARKING; ADD NOTES 11, 12, 13; CHANGE ANGLE -95/-97/-98 TO 106°	
D	05.11.23	ADD -103/-104/-105/-106; REMOVE -67	
E	06.06.09	1.75 WAS 1.88, 4.75 WAS 4.13 ON -08/-07, 1.00 WAS 1.20 ON -09/-10	
F	06.10.06	ADD NOTE 14; CORRECT PART TITLE, NOW D3140-09/-92/-104 SHOWN D3140-10/-91/-103 OPPOSITE	

RELEASED

06.11.13

QTY -05	QTY -06	QTY -07	QTY -08	QTY -09	QTY -10	PART NUMBER	DESCRIPTION
X						D3140-05	DOOR
	X					D3140-06	DOOR
		X				D3140-07	DOOR
			X			D3140-08	DOOR
		1		X		D3140-09	DOUBLER ASSEMBLY
			1		X	D3140-10	DOUBLER ASSEMBLY
3	3					D3140-57	PAD
1	1					D3140-59	PAD
2	2					D3140-61	PAD
2	2					D3140-63	PAD
		1	1			D3140-69	PAD
		1	1			D3140-71	PAD
		1	1			D3140-73	PAD
		1	1			D3140-75	PAD
		1	1			D3140-77	PAD
		1	1			D3140-79	PAD
				1	1	D3140-85	ANGLE
1	1					D3140-87	DOUBLER
				1	1	D3140-89	DOUBLER
		1				D3140-91	DOUBLER
			1			D3140-92	DOUBLER
3	3					D3140-95	DOUBLER
1						D3140-97	DOUBLER
	1					D3140-98	DOUBLER
		1	1			D3140-99	DOUBLER
		2	2			D3140-101	DOUBLER
		1				D3140-103	DOUBLER
			1			D3140-104	DOUBLER
		1				D3140-105	DOUBLER
			1			D3140-106	DOUBLER
1	1					D3140-241	DOUBLER
1		1				D3140-301	DOUBLER
	1		1			D3140-303	DOUBLER
				5	5	MS20426AD3-4	RIVET

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CHECKED Jh	APPROVED H	DRAWING NO. D3140	REV. F SHEET 2 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS

1

COMPOSITE LAYUP & BONDING I.A.W. DELASTEK PROCESS SPEC. TEC-77
MATERIAL STORAGE & HANDLING TO BE I.A.W. DART QSI 006
MAIN LAYUP USES FIBERCOTE E-761/7781 EPOXY FIBERGLASS.
FILL WITH EPOCAST 87269 OR MAGNOBOND 77 A & B AND MA560 FOAM/ NB-51/30 FOAM

2

FINISH: DUPONT HIGHBUILD GREY PRIMER 1144-S

3

MAKE PARTS IN ACCORDANCE WITH THE FOLLOWING TOOLS/MOLDS:

PART	TOOL
D3140-05	B30-23000-01T
D3140-06	B30-23000-02T
D3140-07	B30-23000-03T
D3140-08	B30-23000-04T
D3140-57	B30-23000-57T
D3140-61	B30-23000-61T
D3140-63	B30-23000-63T
D3140-69	B30-23000-69T
D3140-71	B30-23000-71T
D3140-73	B30-23000-73T
D3140-75	B30-23000-75T
D3140-77	B30-23000-77T
D3140-79	B30-23000-79T
D3140-89	D3140-89T1
D3140-301	D3140-301T1
D3140-303	D3140-303T1

RELEASED

06.11.13

4

MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK (M2024T3S.032)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

5

MATERIAL: 2024-T3 (QQ-A-250/4) 0.020 THICK (M2024T3S.020)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

6

MATERIAL: 5052-H32/H34 (QQ-A-250/8) 0.040 THICK (M5052H32S.040)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

7

MATERIAL: POLIMEX TR75 1" THICK 4.5 LB KLEGECELL

8

ALL DIMENSIONS IN INCHES

9

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

10

MATERIAL: 6061-T6 (QQ-A-250/11) 0.063 THICK (M6061-T6S.063)
FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

11

DOUBLER TO SIT ON TOP OF FOAM AT THIS LOCATION

12

DOUBLER TO BE RECESSED FLUSH INTO FOAM AT THIS LOCATION

13

RUBBER STAMP WITH DART P/N D3140-05/-06/-07/-08 USING MIL-STD-130

14

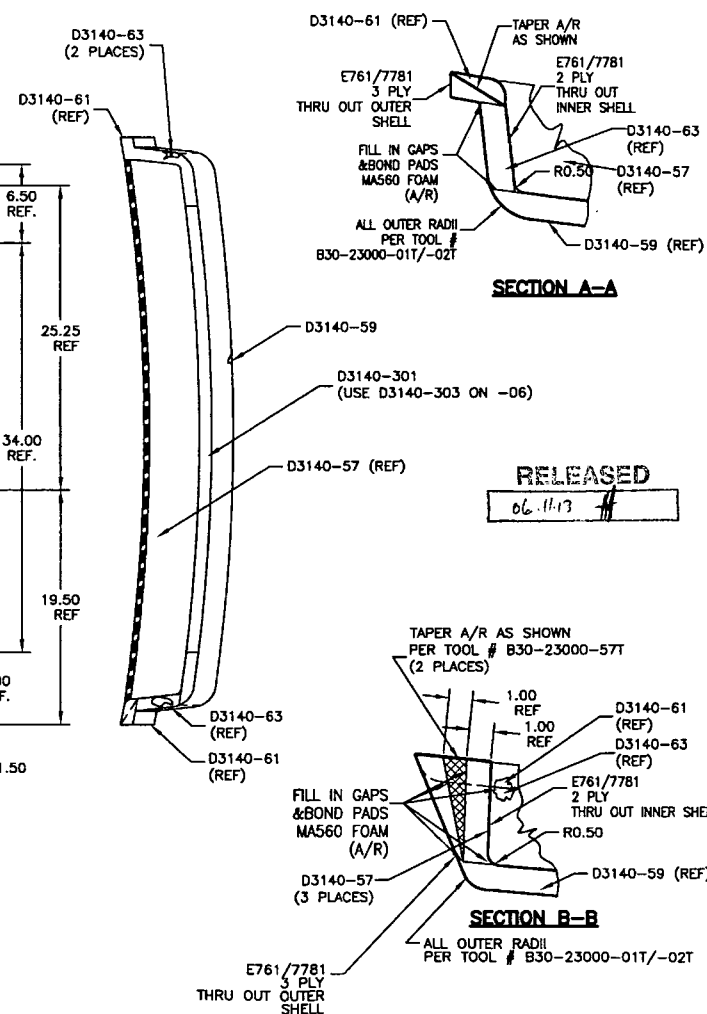
PARTS MUST BE SCUFFED WITH 80 GRIT SANDPAPER PRIOR TO ACID ETCH AND
ALODINE PER DART QSI 005 4.1

F

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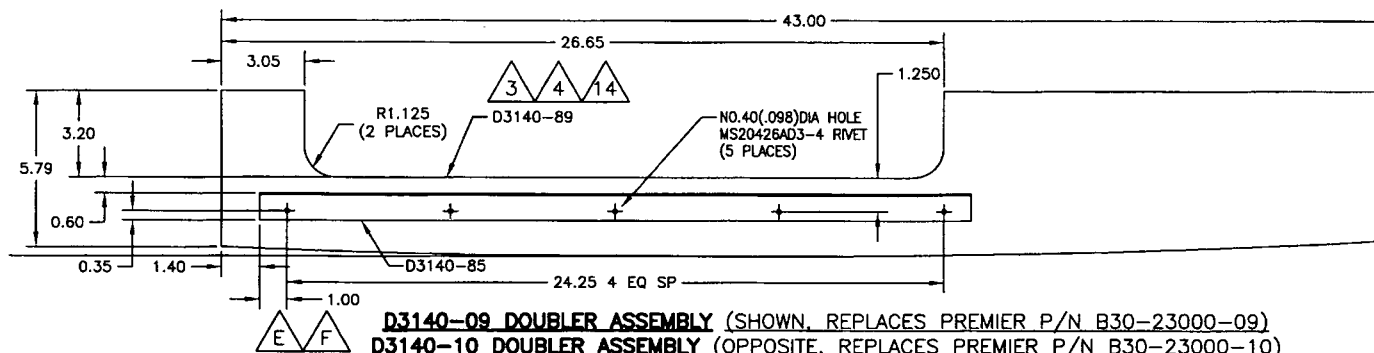
06.11.13

E761/7781
3 PLY
THRU OUT OUTER
SHELL

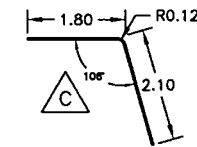
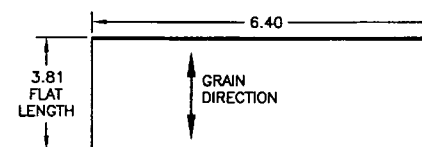
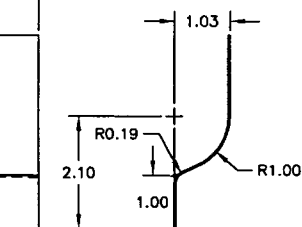
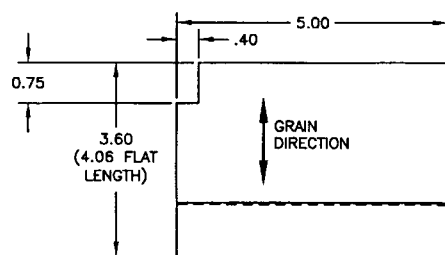
Three triangles are shown, labeled 1, 2, and 3 from left to right. Each triangle has a horizontal base and a vertical line segment from the top vertex to the base, representing an altitude. Triangle 1 is a right-angled triangle with the right angle at the top vertex. Triangle 2 is an obtuse triangle with the obtuse angle at the top vertex. Triangle 3 is an acute triangle with the acute angle at the top vertex.

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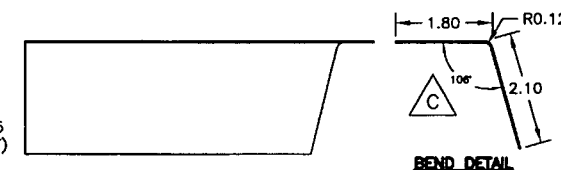
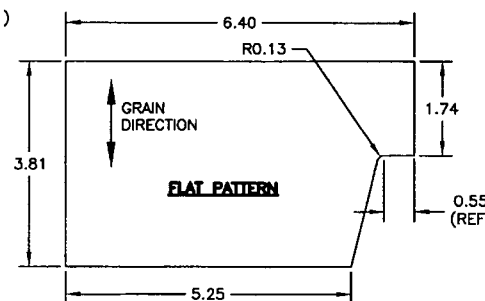
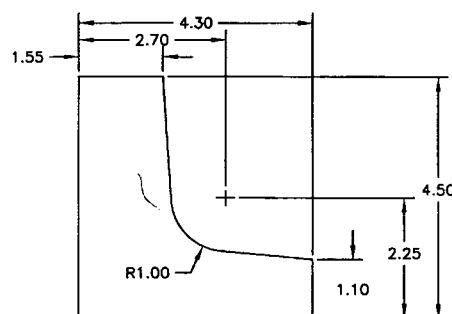


D3140-101 DOUBLER (REPLACES PREMIER P/N B30-23000-101)



RELEASED

06.11.13



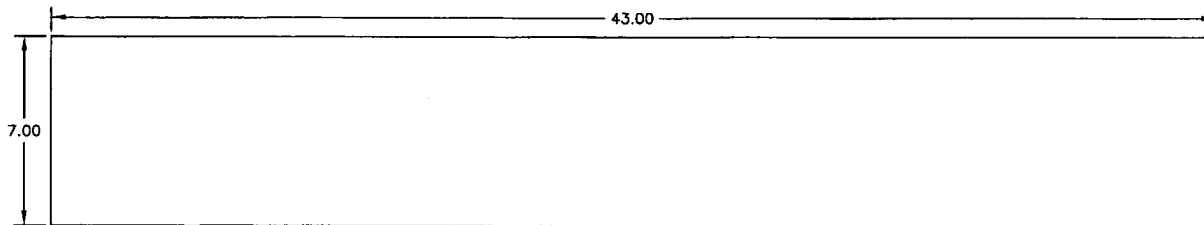
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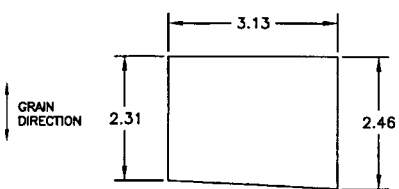
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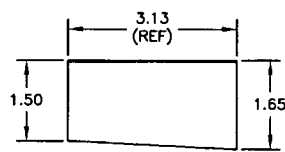
DESIGN 4	DRAWN BY CB	DART	DART AEROSPACE LTD. WILKESBORO, ONTARIO, CANADA
CHECKED JH	APPROVED JH	DRAWING NO. D3140	REV. F SHEET 5 OF 7
DATE 06.10.06	TITLE DOOR	SCALE NTS	



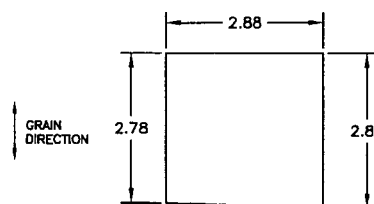
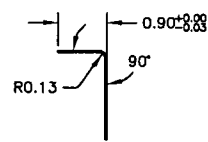
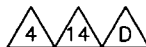
D3140-87 DOUBLER
(REPLACES PREMIER P/N B30-23000-87)



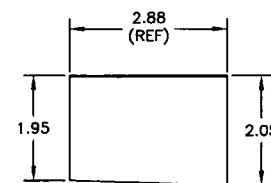
D3140-105F FLAT PATTERN
(USED TO MAKE D3140-105/-106 BRACKETS)



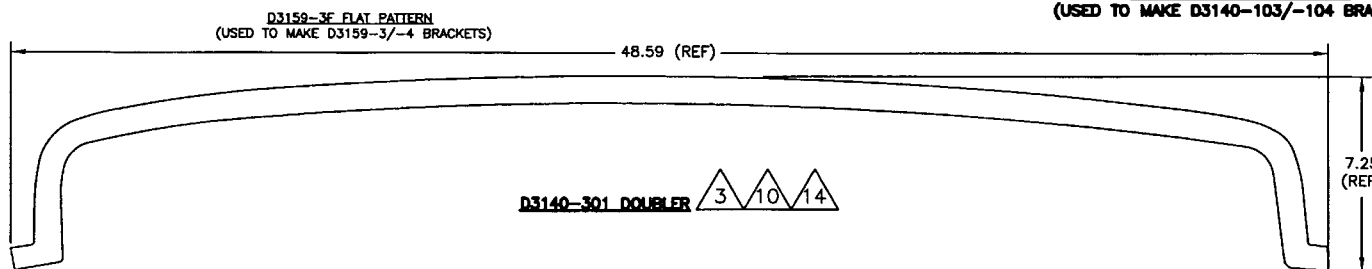
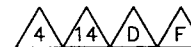
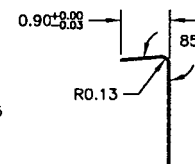
D3140-105 DOUBLER
D3140-106 OPPOSITE



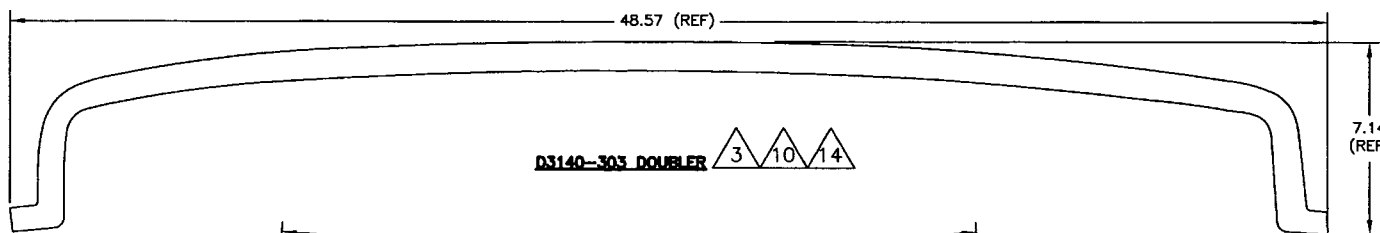
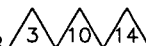
D3140-103F FLAT PATTERN
(USED TO MAKE D3140-103/-104 BRACKETS)



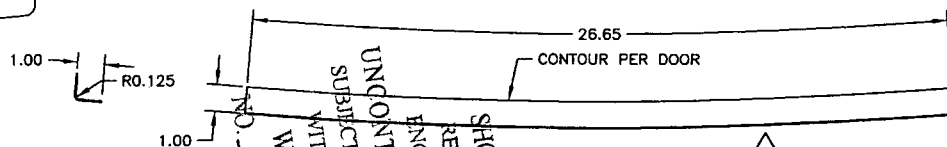
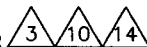
D3140-104 DOUBLER
D3140-103 OPPOSITE



D3140-301 DOUBLER



D3140-303 DOUBLER



D3140-85 ANGLE



FLAT PATTERN: 26.65" x 1.90"
(REPLACES PREMIER P/N B30-23000-85)

RELEASED

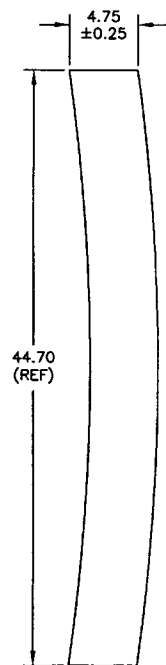
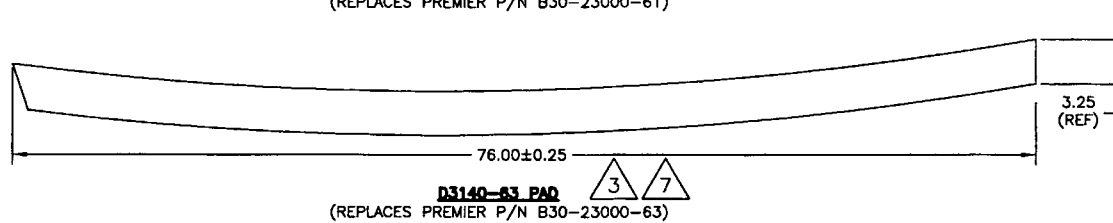
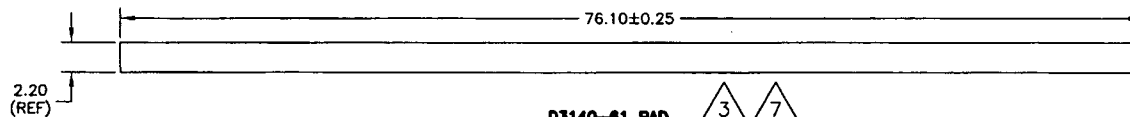
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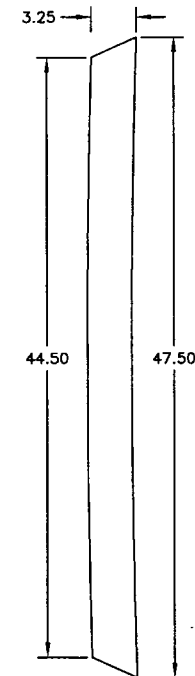
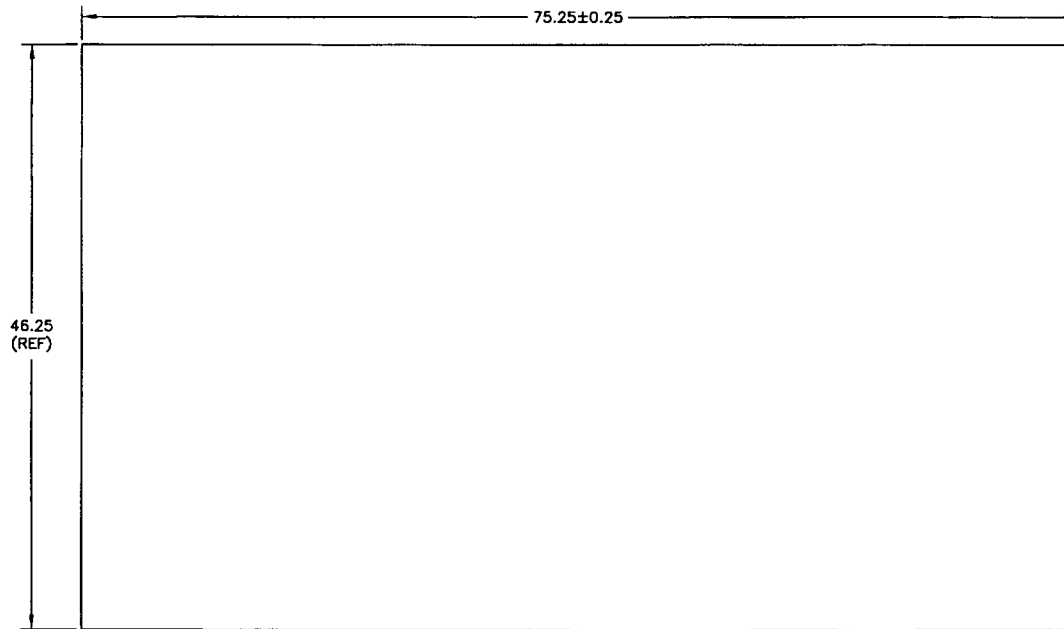
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3140	SHEET 6 OF 7
DATE 06.10.06	TITLE DOOR	SCALE NTS	



D3140-57 PAD
(REPLACES PREMIER P/N B30-23000-57)



D3140-241 DOUBLER 5 14
(REPLACES PREMIER P/N B30-23000-241)

RELEASED

06.11.13

R1.00
(2 PLACES, REF)

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CHECKED <i>dh</i>	APPROVED	DRAWING NO. D3140	SHEET 7 OF 7
DATE 06.10.06		TITLE DOOR	SCALE NTS

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